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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): GP-302521

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Signature /Justin J. Leach/.

Typed or printed Name Justin J. Leach.

In re Application of: Thomas W. Odell, et al.

Application Number	Filed
10/646,559	August 21, 2003

For: VOICE RECOGNITION IN A VEHICLE RADIO SYSTEM

Group Art Unit	Examiner
2618	Blane J. Jackson

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [ ] attorney or agent of record. Registration number _____
- [X] attorney or agent acting under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a). 59,220.

/Justin J. Leach/
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March 27, 2007
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

[X] *Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Odell, Thomas W. et al.
Serial No.: 10/646,559
Filed: August 21, 2003

Group Art Unit: 2618
Examiner: Jackson, Blane J.
Confirmation No.: 9422

For: VOICE RECOGNITION IN A VEHICLE RADIO SYSTEM

Docket No.: GP-302521
Customer No.: 000128

ARGUMENTS ACCOMPANYING PRE-APPEAL BRIEF REQUEST FOR REVIEW

I. Status of Claims

Claims 1, 2, 4, 6-8, 10-12, 14-19, and 21-25 are now pending in this application, of which Claims 1, 11, and 21 are independent. All of these claims currently stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver (US Pat. No. 6,876,970) in view of Hennecke et al. (US Pub. 2004/0034527).

II. Rejections under 35 U.S.C. § 103

A. Applicants' Independent Claims 1 and 11

Applicants' independent Claim 1 recites a vehicle radio system that includes a radio receiver configured to receive: (i) a radio signal, and (ii) a channel-specific phoneme string from a broadcast station, the phoneme string being associated with a particular channel number (or frequency). Claim 1 further specifies that the vehicle radio system includes a microphone and a tuning module having a storage module, a voice recognition engine, and a tuner. When the vehicle's operator speaks an audible (e.g., a radio station's call name), the microphone converts the audible into an audible signal, which is then compared to the stored phoneme string by the voice recognition engine. If the audible signal corresponds to the

stored phoneme string, the tuning module tunes the radio receiver to the stored channel number (or frequency) associated with the phoneme string.

Applicants' independent Claim 11 generally recites a method that may be performed by the vehicle radio system of Claim 1. For example, Claim 11 includes the steps of receiving (i) a radio channel and (ii) a phoneme string associated with the radio channel from a broadcast station; storing the frequency of the radio channel and the phoneme string; and tuning to the frequency of the radio channel when an audible signal derived from an operator command corresponds to the first phoneme string.

In the initial Office Action mailed June 13, 2006, Applicants' Claims 1 and 11 were first rejected under 35 U.S.C. § 102(e) as being anticipated by Silver (US Pat. No. 6,876,970). In the Amendment mailed September 11, 2006, Applicants amended Claim 1 to specify that a channel-phoneme string associated with a channel number is received from the broadcast station in addition to the radio signal. Applicants also amended Claim 11 in a similar manner. In the accompanying remarks, Applicants pointed out that the Silver reference does not teach or suggest a radio receiver that is configured to receive a channel-specific phoneme string associated with a first channel number (or frequency) from a broadcast station.

In the subsequent Office Action mailed December 1, 2006, the Examiner agreed that the Silver reference failed to teach or suggest such step. Despite this, Examiner again rejected Claims 1 and 11 under 35 U.S.C. § 103 stating that the Hennecke reference (US Pub. 2004/0034527) could be relied upon to cure the deficiencies of the Silver reference. In particular, Examiner observed that the Hennecke reference teaches a "...speech recognition system that breaks down the voice input into phonemes and matches the phonemes into a list or group list." Examiner emphasized that the Hennecke reference mentioned the possibility of wirelessly downloading the group list over a wireless radio network. The Examiner then concluded that it would have been obvious to one of ordinary skill in the art to modify the voice recognition system of the Silver reference with the data download training method of the Hennecke reference.

In an after-final Response mailed January 25, 2007, Applicants requested that the Examiner might reconsider the rejections of Applicants' independent Claims 1 and 11. Applicants submitted that the rejections of Claims 1 and 11 were in error because the

Hennecke reference failed to teach a radio receiver configured to receive a channel-specific phoneme string associated with a particular radio channel from a broadcast station. Approximately six weeks later, Applicants received the Advisory Action mailed March 7, 2007, reaffirming the rejections of Applicants' independent Claims 1 and 11.

In this Pre-Appeal Brief, Applicants again emphasize that the Hennecke reference cannot be relied upon to cure the deficiencies of the Silver reference for the following reason: the Hennecke reference, like the Silver reference, fails to teach or suggest the reception of *a channel-specific phoneme string associated with a particular radio channel from a broadcast station.* This is not to say that the Hennecke reference does not disclose the wireless reception of a list of phonemes over a radio network; as stated in the after-final Response mailed January 25, 2007, Applicants agree that the Hennecke reference teaches that a speech recognition system may be programmed by installing a group of list elements in a number of manners, including by wirelessly downloading the group of list elements over a radio network. As explained in Hennecke Paragraph 0019:

> The list of list elements may be installed on the matching unit and database 7 during manufacture and/or during subsequent operation of the electrical device that has the speech recognition system 1. The list may be downloaded from a flash memory or similar device. The list also may be downloaded via a communication system such as a landline and wireless radio networks, a global satellite network, and the like.

Paragraph 0017 of the Hennecke reference further explains that the group of list elements is a series of data entries falling into a particular category or categories, such as a series of place names, street names, personal names, or telephone numbers.

In summary, Hennecke reference discloses the possibility of wirelessly downloading a list of generic data entries over a non-descript radio network--no more, no less. In contrast, Applicants' independent Claims 1 and 11 recite the wireless reception of a specific data item; i.e., *a phoneme string associated with a particular radio channel*. The Hennecke reference does not teach the wireless reception of a phoneme string of this type. Moreover, Applicants' Claims 1 and 11 recite that this specific data item is received from a specific source; i.e., *from a radio station broadcasting the radio channel (or signal) with which the phoneme string is*

associated.[1] The Hennecke reference does not teach receiving a phoneme string from such a source. These differences are by no means trivial; by automatically downloading phoneme string (or strings) from an individual broadcast station (or stations) in this manner, Applicants' claimed vehicle radio system continually updates its programming in accordance with one or more audible identifiers self-established by the individual broadcast station (or stations).

It should thus be appreciated that the Hennecke reference fails to teach the reception of a channel-specific phoneme string associated with a particular channel from a broadcast station. The Hennecke reference, then, cannot compensate for the deficiencies established with respect to the Silver reference. For this reason, Applicants respectfully submit that the Hennecke and Silver references, whether taken singly or in valid combination, do not render Applicants' independent Claims 1 and 11 obvious under 35 U.S.C. §103. As no additional rejections have been asserted against Claims 1 and 11, Applicants further submit that Applicants' independent Claims 1 and 11 are allowable.

B. Applicants' Dependent Claims 2, 4, 6-8, 10, 12, and 14-19

Applicants' Claims 2, 4, 6-8, 10, 12, and 14-19 each depend, either directly or indirectly, from Applicants' independent Claim 1 or 11 and are consequently believed allowable therewith.

C. Applicants' Independent Claim 21

Applicants' independent Claim 21 recites, *inter alia*, a method of operating a vehicle radio system, which includes the steps of: (1) receiving a first radio channel and the phonetic spelling of at least one word associated therewith, and (2) generating a first phoneme string from the phonetic spelling. Applicants' Paragraph 0021 explains that "[w]hen compared to transmitting phonemes, the phonetic spelling is more universal, works with different voice recognition engines, and reduces the amount of data transmitted to the vehicle radio system."

In the final Office Action mailed December 1, 2006, the Examiner acknowledged that the Silver reference does not teach either of the steps recited above. However, the Examiner

[1] For example, Applicants' Claim 11 recites the step of receiving a first radio channel and a first phoneme string associated therewith from a broadcast station. Claim 11 thus specifies that a particular radio channel is received from a broadcast station and, furthermore, that a phoneme string associated with the particular radio channel is also received from the same broadcast station.

asserted that the Hennecke reference teaches each of these steps. Applicants respectfully disagree. First, as indicated above, the Hennecke reference does not teach the reception of a phonetic spelling of a word associated with a radio channel. Second, the Hennecke reference does not teach the step of generating a phoneme string from such a received phonetic spelling.

It should thus be appreciated that the Silver and Hennecke references fail to teach at least two steps recited in Applicants' independent Claim 21 and, consequently, cannot render Claim 21 obvious under 35 U.S.C. § 103(a). As no further rejections have been asserted against Claim 21, Applicants respectfully submit that Claim 21 is allowable.

D. Applicants' Dependent Claims 22-25

Applicants' Claims 22-25 are each believed to properly depend from Applicants' independent Claim 21 and are consequently believed allowable therewith.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that the Examiner's reliance upon the Silver and Hennecke references does not properly support a rejection of Applicants' independent Claims 1, 11, and 21 under 35 U.S.C. § 103(a). Accordingly, Applicants respectfully submits that present application is in condition for allowance.

If for some reason Applicants have not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

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